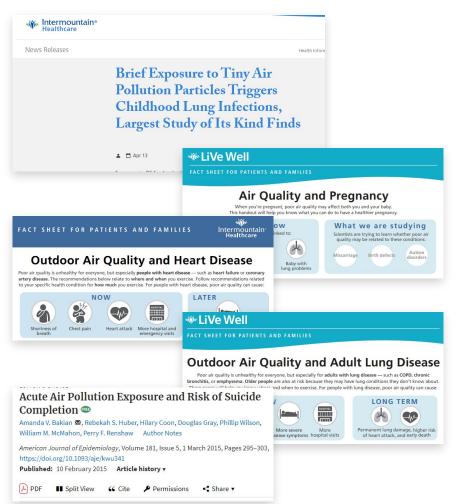




AIR QUALITY APPROPRIATIONS 2022

Air pollution is harmful to public health.



Health Effects of Air Emissions and Pollutants

Utah-based health studies highlighted in yellow Suicide Stroke Asthma Neurological development Respiratory disease mortality Mental health Respiratory disease morbidity Neurodegenerative disease Lung cancer Pneumonia Cardiovascular disease mortality **Upper and lower** Cardiovascular disease morbidity **Respiratory symptoms** Myocardial infarction Airway inflammation Arrhythmia Decreased lung function Congestive heart failure Decreased lung growth Changes in heart rate variability Insulin resistance 7 ST-segment depression Type 2 diabetes Type 1 diabetes School absences Bone metabolism Juvenile idiopathic arthritis High blood pressure Pre-term birth **Endothelial dysfunction** Decreased birthweight Increased blood coagulation Decreased fetal growth Systemic inflammation Intrauterine growth retardation Deep venous thrombosis Decreased sperm quality Skin aging Pre-eclampsia

Air Conservation Act

(Utah Code 19-2-101)



To achieve and maintain levels of air quality which will protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state.

What we do.

→ Air Quality Board

Planning

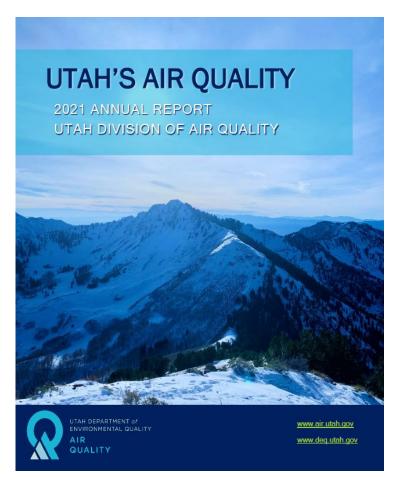
- Air Monitoring
- Air Quality Policy
- Technical Analysis
- Emissions Inventory

Permitting

- Major New Source Review
- Minor New Source Review
- Operating Permit CAA Title V sources



Annual Report

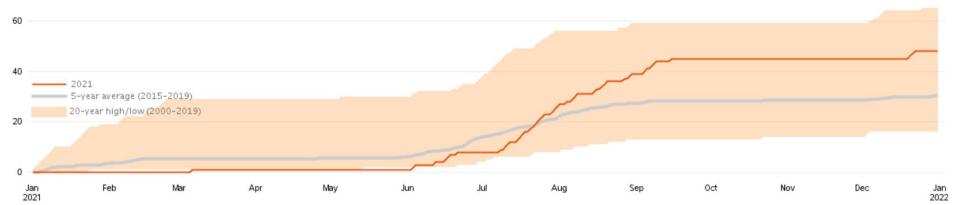




Wasatch Front combined PM_{2.5} and ozone in 2021

Cumulative Number of AQI Days >100

Salt Lake County, UT



Source: U.S. EPA AirData https://www.epa.gov/air-data

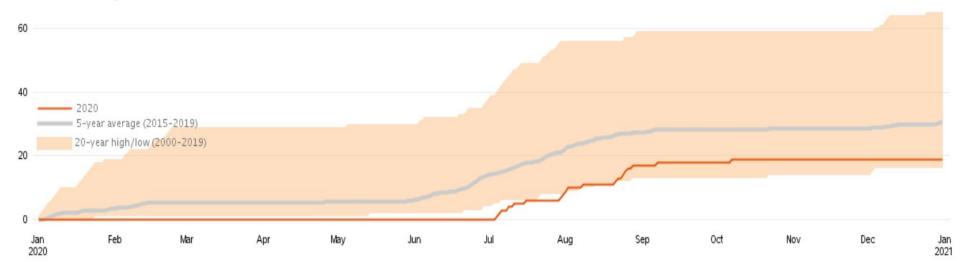
Generated: January 31, 2022



Wasatch Front combined PM_{2.5} and ozone in 2020

Cumulative Number of AQI Days >100

Salt Lake County, UT



Source: U.S. EPA AirData https://www.epa.gov/air-data
Generated: January 28, 2021



https://www.epa.gov/outdoor-air-quality-data/air-data-daily-air-quality-tracker

Air Quality Update

Non-attainment

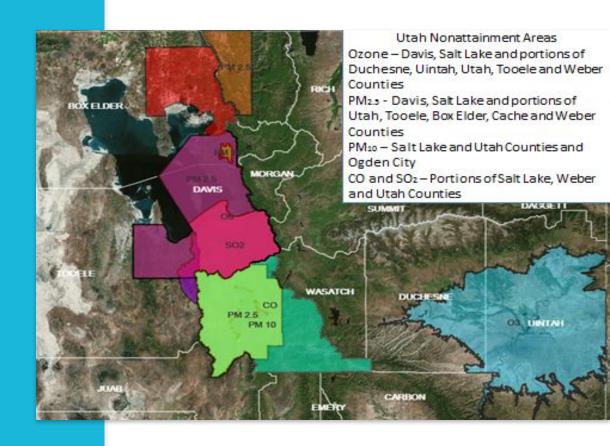
Focused on meeting federal air quality standards through planning, permitting and compliance

Clean Data

Determinations for Logan, Provo and Salt Lake PM_{2.5} Non-attainment areas

Maintenance Plans

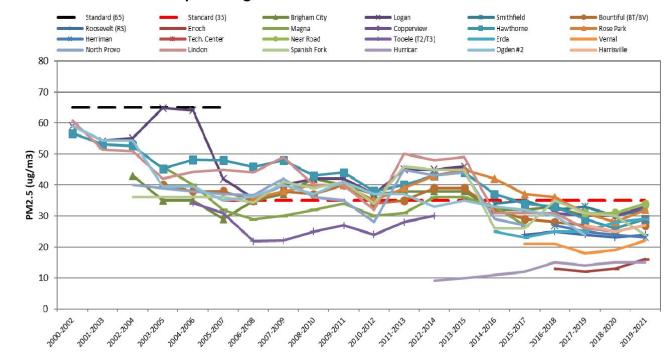
Implementation Plan for Salt Lake, Provo and Logan PM_{2.5} Non-attainment areas



Fine Particulate Matter - PM_{2.5}

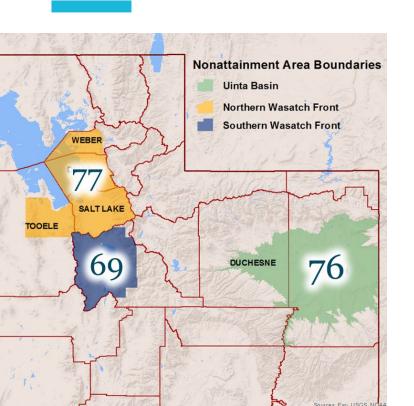
- All areas have attained the 2006 PM_{2.5} NAAQS and a federally approved Clean Data Determination
- Maintenance plans show continued attainment of the standard to 2035
- EPA has proposed redesignation to attainment







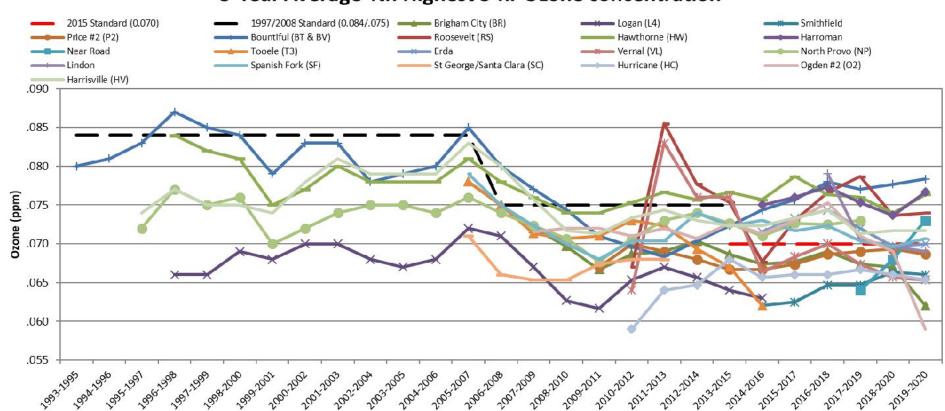
Utah Ozone Nonattainment Area Planning



- Three nonattainment areas currently classified as Marginal
- Attainment deadline: Aug. 2021 (based on 2018, 2019 & 2020 data)
- If the standard is not met, we will be bumped up to Moderate which requires:
 - → 15% reduction of NOx and VOCs
 - → Vehicle Inspection and Maintenance Program
 - → Reasonably Available Control Technology installed on point sources
 - → Demonstration of attainment by Aug. 2024

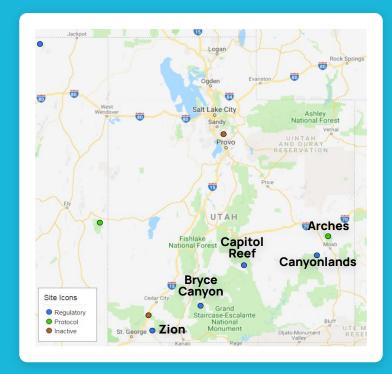
Utah Ozone Nonattainment Area Planning

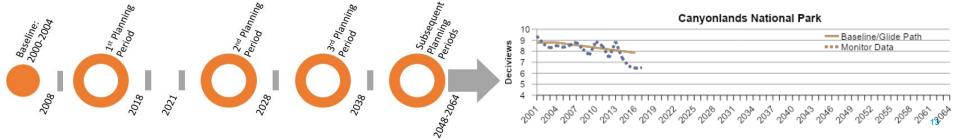
3-Year Average 4th Highest 8-hr Ozone concentration



Regional Haze 2nd Planning Period

- Protect visibility in Class I areas
- Reasonable Progress is the second round focus
- Reasonable controls for industrial sources with the highest impact
- Partnership with 15 western states
- Currently working with sources to evaluate potential control measures
- Work over the past 19 years has resulted in visible progress at all five Class I areas







Free Fare Day Pilot Project





DAQ will provide a benefits analysis to legislature at the end of the program.

Report will include UTA data on ridership & results from surveys on Free-Fare days.

Winter & Summer Campaigns







Winter Campaign 2020-2021

53.5 million impressions

December 7, 2020 to February 22, 2021

The campaign reached 97.2% of UCAIR's target audience an average of 24.1 times

MEASUREMENT

89% of respondents said they are familiar with personal actions they can take to improve Utah's air





77% reported lowering their thermostat by two degrees

Summer Campaign 2021

	Platform	Reach	Frequency
Y	Twitter	183,482	2.18
f	Facebook	161,275	5.14
O'	Instagram	89,117	4.26





Summer Campaign 2021

TOP PAID SEACH TERMS

UTAH AIR QUALITY

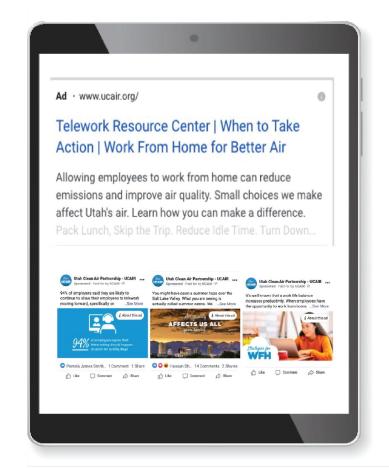
(1,700 clicks/12,000 impressions)

AIR QUALITY IN SLC UTAH

(340 clicks/2,400 impressions)

WORK FROM HOME

(300 clicks/1,800 impressions)

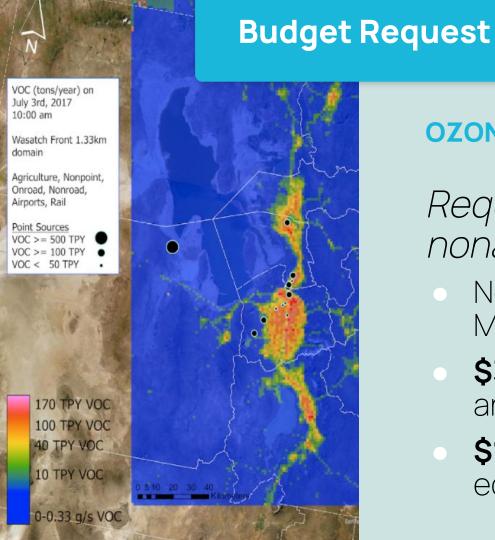




WASATCH BACK AIR MONITORING

Required due to population increase in 2020 Census

- New Air Monitoring Sites in Wasatch and Summit Counties
- \$462,500 one time equipment and site installation expenses
- \$25,000 ongoing operator and equipment expenses



OZONE PRECURSOR MONITORING

Required due to "Moderate" nonattainment status

- New Photochemical Assessment Monitoring Sites (PAMS)
- \$3,235,600 one time equipment and site installation expenses
- \$1,005,000 ongoing operator and equipment expenses



SUMMER AIR QUALITY OUTREACH

Ozone focused summer outreach campaign aimed at educating Utahns about summertime ozone issues which are less well known than our wintertime inversion challenges.

\$500,000 One Time

Budget Request



TARGETED SALARY INCREASES

Governor's Budget Recommendation identified that the DEQ's Environmental Scientists median income was 26.8% below market and Office Specialists were 15.8% below market.



Air Quality Incentive Program Grants

\$4,888,300

National Clean Diesel Grant \$3,199,800

Targeted Airshed Grant

\$500,000

ARPA PM2.5 Direct Award Grant



Links for more information

Moderate Area Ozone State Implementation Plan (SIP) Development

https://deq.utah.gov/air-quality/moderate-area-ozone-state-implementation-plan-sip-development

Regional Haze SIP Development

https://deq.utah.gov/air-quality/regional-haze-in-utah

Air Quality Incentive Programs

https://deq.utah.gov/air-quality/incentive-programs-aq/air-quality-incentive-programs

Air Quality Research

https://deg.utah.gov/category/air-quality/aq-applied-research-studies

General Air Quality Information for Utah

https://deq.utah.gov/division-air-quality



